



COUNTY OF SAN DIEGO
Great Government Through the General Management System – Quality, Timeliness, Value
DEPARTMENT OF HUMAN RESOURCES

CLASS SPECIFICATION

CLASSIFIED

RETIREMENT INFORMATION TECHNOLOGY SERVICES MANAGER

Class No. 007569

■ CLASSIFICATION PURPOSE

To plan, direct, oversee and perform complex work in network administration or applications development for the San Diego County Employees' Retirement Association (SDCERA); to provide technology support to other departments for achievement of their business, operational, public service and productivity objectives; to ensure system support services are working efficiently and effectively; and to perform related duties as assigned.

■ DISTINGUISHING CHARACTERISTICS

The Information Technology Services Manager is a first level management class responsible for participating in and directing staff and/or outside consultants in either network administration and desktop support functions for the SDCERA's servers and operating system platforms; or software programming, database administration and web site development. Under general supervision of the Business Systems Director, the incumbent is responsible for either the design, development, integration and management of complex and specialized network systems and telecommunications operations that support the administration of the retirement trust fund, confidential personnel and payroll records and transactions for members of the County Employees' Retirement System (CERS); or development, implementation and maintenance of large complex applications, as well as the design, development, implementation and maintenance of enterprise databases supporting SDCERA operations, service delivery and decision making.

The class requires significant accountability and decision-making responsibility. Assignments are usually given in terms of broad operational or project requirements and performance is measured in terms of overall performance and results.

■ FUNCTIONS

The examples of essential functions listed in the class specification(s) are representative but not necessarily exhaustive or descriptive of any one position in the class(es). Management is not precluded from assigning other related functions not listed herein if such functions are a logical assignment for the position.

Essential Functions:

1. Plans, organizes, controls, integrates and evaluates the work of assigned staff engaged in operating the technologies of SDCERA to achieve department goals and to support customer service.
2. Coordinates and integrates project activities with other IT sections; organizes and coordinates activities across multiple customer business units.
3. Participates in establishing hardware and software guidelines for the SDCERA; participates in development of information technology policies and procedures.
4. Participates in the development of IT methodology, data standards and policies in order to define IT priorities, implement future technology requirements and manage current IT resources.
5. Provides advice, training and feedback to SDCERA staff in the optimal use of Information Technology.
6. Manages external vendor projects, deliverables, schedules, and costs for systems support and maintenance.

Operations Option

Essential Functions:

1. Manages, monitors and oversees administration of SDCERA enterprise servers and operating system platforms to ensure systems support services are working properly.
2. Oversees the installation, configuration, integration and administration of enterprise, file, print and application servers, client workstations and other devices.
3. Manages and oversees the administration of user accounts, including network security, user profiles and user/group access and rights.

4. Manages and participates with members of the operations support team, technical specialists, vendors and end users to ensure effective integration and concurrent connectivity of multiple platforms and networks.
5. Analyzes and documents end user system and network requirements; researches, tests and evaluates vendor hardware and software products; evaluates products for their conformance with customer requirements and compatibility with the SDCERA's operating system and network environment; makes recommendations on the selection and purchase of hardware and software.
6. Manages and oversees large hardware and software migration and conversion projects; manages and directs the installation of multi-platform interfaces using software tools.
7. Manages and oversees the review and monitoring of systems performance statistics and fine tuning of CPU load, memory, disk usage and input/output to achieve optimal system speed, reliability and performance; benchmarks systems and identifies and implements improvements for reliability and performance; assesses system capacity issues, recommends hardware and software upgrades or replacements.
8. Manages and oversees help desk functions, activities and staff; manages and evaluates the receipt and coordination of inquiries and requests for technical assistance from customers on computers, peripheral equipment, local and wide area networks, Internet and [future] Intranet services, various server platform connections and secure dial-in access.
9. Researches, troubleshoots, diagnoses and resolves the most complex and difficult hardware, software and network connectivity problems to minimize system downtime, including performance degradation, problems in interactions between hardware, software and network operating systems and hardware/disk failures; oversees the configuration, maintenance and troubleshooting of servers, workstations, laptops, printers and other peripheral equipment and hardware.
10. Manages, directs and oversees the maintenance of technical systems and configuration documentation and logs to maintain the technical knowledge base; oversees documentation of network components and history.
11. Manages and oversees development and maintenance of the SDCERA's voice, data and video telecommunications systems, switches and equipment.
12. Manages and directs the installation, troubleshooting, modification, maintenance and repair of system infrastructure, equipment, software and services.

Applications Development Option

Essential Functions:

1. Participates in, manages and oversees the design, implementation and maintenance of internal systems applications.
2. Oversees scheduling, maintenance, conversion and data migration in the implementation of new software features and/or applications.
3. Defines, implements and tracks software engineering methodologies and processes to support member services operations.
4. Monitors production environments to optimize performance, resource use and physical implementation of databases; identifies and plans for database scalability and capacity increases.
5. Designs, implements and maintains separate development, test and production database environments.
6. Develops new or enhanced systems; anticipates impacts on other business processes and data sets.
7. Oversees the development of application prototypes and system requirement and/or specification documents.
8. Recommends work process and/or operating changes to complement system functionalities; advises customers on desirable functionalities to meet foreseeable systems needs.
9. Manages, directs and oversees planning for unit and systems integration testing.
10. Approves placing applications into production; monitors operations and performance; ensures timely and effective problem identification and resolution; investigates and resolves customer complaints.
11. Oversees the development of systems and user documentation.
12. Ensures all quality assurance reviews are completed successfully.
13. Directs production implementation and turnover; ensures newly installed applications are functioning correctly.
14. Designs and implements security, backup and disaster recovery plans.

15. Develops database solutions to identify data integrity issues, correct data inconsistencies, or to provide accurate information to internal and external customers quickly.

■ KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

The following apply to all program areas:

- Principles, practices and techniques of information systems management, including applications design, software development methodologies, tools, and hardware and software options for business, financial and operations applications.
- Basic principles and practices of systems analysis and design.
- Standard business support software, including word processing, spreadsheet, presentation, graphics and database programs.
- Federal, state and local laws, codes and regulations pertaining to the use of computer hardware and software.
- Project management methods, tools and techniques.
- Customer relationship management and internal consulting concepts and practices.
- SDCERA functions and associated information management needs.
- Principles and practices of public administration, including budgeting and purchasing.
- Principles and practices of effective supervision management.
- SDCERA human resources standards and procedures.
- Disaster planning and recovery techniques.

Operations Option (in addition to the above):

- Operating system architecture, characteristics, commands and components applicable to SDCERA computer platforms.
- Network architecture and theory and principles of network design and integration, including topologies and protocols.
- Principles, methods and techniques for layout, installation, configuration, integration and operation of network systems, equipment and devices.
- Standard network management software, tools and utilities.
- Methods and techniques for performing connectivity testing and network analysis and troubleshooting.
- Principles, practices and methods of network administration and maintenance, including configuration, performance tuning and diagnostic tools.
- Network security principles, practices, techniques and tools.
- Network media and cable plant design and layout.
- Operating system architecture, characteristics, components and limitations of computer platforms and network architectures similar to those used by the SDCERA.
- Principles, practices and methods of systems administration and maintenance.
- Internet/intranet technologies and techniques and network e-mail systems.

Applications Development (in addition to the above):

- The systems development life cycle.
- Relational database theory, design rules and development practices as they apply to applications development.
- Principles and methods of systems analysis, including business process and entity relationship analysis tools and methods.
- Principles, practices, methods and techniques of systems design, integration and optimization and applications development methodologies, tools and programming languages.

Skills and Abilities to:

The following apply to all program areas:

- Plan, organize, integrate and manage an information systems unit and build teamwork and collaboration within unit and with other units and departments to optimize results.
- Analyze customer business and technology needs, formulate conceptual frameworks and apply state-of-the-art technology in developing integrated, efficient and cost effective solutions.
- Learn and understand customer business processes and requirements to the depth needed to consult effectively on solutions to current and future business needs.
- Identify information management issues and opportunities, analyze problems and alternatives and develop sound conclusions and recommendations.
- Set priorities and allocate resources to most effectively meet needs in a timely manner.
- Prepare clear, concise and accurate reports and other materials.
- Communicate effectively orally and in writing.
- Exercise sound independent judgment within general guidelines.
- Use tact and diplomacy when dealing with sensitive, complex and/or confidential issues.
- Establish and maintain highly effective customer-focused working relationships with all levels of management, employees, consultants, contractors, vendors and others encountered in the course of work.

- Analyze complex problems, evaluate alternatives and make sound recommendations.
- Plan, organize and complete projects efficiently and in accordance with SDCERA quality standards.
- Understand and apply the analysis of functional requirements to the development of proposals, specifications and recommendations for efficient, cost-effective systems and technology solutions.
- Obtain accurate and complete information from customers, in person and by telephone, to identify their needs and problems and develop responses and solutions.
- Prepare clear, concise and accurate program documentation, reports of work performed, and other written materials.
- Work collaboratively and effectively as a project leader and member.

Operations Option (in addition to the above):

- Develop conceptual frameworks and apply state-of-the-art technology to the design and management of operating system and network infrastructures.
- Configure, maintain, manage and tune the operations of complex operating and network systems to achieve optimal technical performance and user support.
- Troubleshoot complex system, hardware, software and network connectivity problems and make or recommend modifications.
- Install and configure PCs, peripheral equipment, devices and other technology tools.

Applications Development Option (in addition to the above):

- Understand and apply the analysis of functional requirements to the development of proposals, specifications and recommendations for efficient, cost-effective applications, database management and technology solutions.
- Perform applications, database and systems troubleshooting and tuning to resolve complex systems, data management, communication and inter-operating problems.
- Define, implement and track software engineering methodologies and processes.

■ EDUCATION/EXPERIENCE

Education, training, and/or experience that demonstrate possession of the knowledge, skills and abilities listed above. An example of qualifying education/experience is: bachelor's degree from an accredited college or university with a major in computer science, management information systems or a closely related field, and four (4) years of progressively responsible experience in (for Operations) the analysis, design, development and administration of network and systems infrastructures in an environment similar in size and complexity to that of the SDCERA, or (for Applications Development) the design, development and administration of complex applications.

■ ESSENTIAL PHYSICAL CHARACTERISTICS

The physical characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of the classification(s). Reasonable accommodation may be made to enable an individual with qualified disabilities to perform the essential functions of a job, on a case-by-case basis.

Continuous upward and downward flexion of the neck. Frequent: sitting, repetitive use of hands to operate computer keyboards, printers and copiers. Occasional: walking, standing, bending, stooping, kneeling, squatting; simple grasping, reaching above shoulder level, lifting or pushing/pulling weights of 26 – 50 pounds.

Must have adequate close vision (20 inches or less) and ability to adjust focus from near to intermediate distances.

Must be able to perform highly detailed work under changing/intensive deadlines and constant interruptions; perform multiple, concurrent tasks; engage in (internal) customer contact and deal with dissatisfied individuals.

■ SPECIAL NOTES, LICENSES, OR REQUIREMENTS

License

A valid California class C driver's license, which must be maintained throughout employment in this class, is required at time of appointment, or the ability to arrange necessary and timely transportation for field travel. Employees in this class may be required to use their own personal vehicle.

Certification/Registration

None required.

Working Conditions

Typical office environment; indoors, with moderate noise level; exposure to computer screens.

Background Investigation

Must have a reputation for honesty and trustworthiness. Misdemeanor and/or felony convictions may be disqualifying depending on type, number, severity, and recency. Prior to appointment, candidates will be subject to a background investigation.

Probationary Period

Incumbents appointed to permanent positions in this class shall serve a probationary period of 12 months (Civil Service Rule 4.2.5).

New: July 22, 2005

Retirement Information Technology Services Manager (Class No. 007569)

Union Code: CEM

Variable Entry: Y